Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Bottom Dissolved Oxygen Maps From SEAMAP Summer Groundfish/Shrimp Surveys

1.2. Summary description of the data:

Bottom dissolved oxygen (DO) data was extracted from environmental profiles acquired during the Southeast Fisheries Science Center Mississippi Laboratories summer groundfish trawl surveys of the Western and North-central Gulf of Mexico from 1982 to 1998. The data were distributed to hypoxia researchers in near real time and used to generate bottom DO maps as part of the Hypoxia Watch Project (http://www.ncddc.noaa. gov/hypoxia/). The profiles were acquired with a Sea-Bird Model SB9 profiler equipped with pressure, temperature, conductivity, fluorescence, and beam transmission sensors. The data were processed with Sea-Bird software using the standard processing protocol developed by the Mississippi Laboratories. Water temperature, beam transmission, and derived salinity, DO and DO percent saturation, and density were retained in the processed files. SAS software was used to extract the bottom DO and other relevant data (e.g., date, time, position, and station number) and format the data as comma-delimited ASCII files.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

1985 to 1998

1.5. Actual or planned geographic coverage of the data:

W: -98, E: -81, N: 31, S: 24

Texas/Mexico border to east of the Mississippi River

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy,

research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Sea-Bird Model SBE9 profiler equipped with pressure, temperature, conductivity, fluorescence, and beam transmission sensors.

Platform: NOAA ships

Physical Collection / Fishing Gear: Not Applicable

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

Nelson May

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

nelson.may@noaa.gov

2.5. Phone number:

228-688-1213 ext 121

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Nelson May

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

0

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

The data were processed with Sea-Bird software using the standard processing protocol developed by the National Marine Fisheries Service, Southeast Fisheries Science Center, Mississippi Laboratories. The data were processed with the Sea-Bird software modules Data Conversion, Filter, Loop Edit, Derive, Bin Average, and Strip. Water temperature, beam transmission, and derived salinity, dissolved oxygen (DO), DO percent saturation, and density were retained in the processed profiles. SAS software was used to extract the bottom DO and other relevant data (e.g., date, time, position, and station number) and format the data as comma-delimited ASCII files.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

Graphical analysis and software error traps were used to insure that the data were within acceptable ranges and that the station number, position, time, and water depth data had been correctly recorded in the header of each file. At the beginning of each deployment, the profiler was lowered to a depth of 2-3 meters to allow the conductivity cell to acclimate for a total of three minutes. The data acquired during the acclimation period was deleted prior to processing with Sea-Bird software. Winkler reference dissolved oxygen (DO) titrations were performed periodically to verify the DO readings measured by the electronic sensors on the profiler.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

- **6.1. Does metadata comply with EDMC Data Documentation directive?**Yes
 - 6.1.1. If metadata are non-existent or non-compliant, please explain:
- 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/29559

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

National Centers for Environmental Information - Silver Spring, Maryland (NCEI-MD)

7.2.1. If data hosting service is needed, please indicate:

Yes

7.2.2. URL of data access service, if known:

https://www.nodc.noaa.gov/cgi-bin/OAS/prd/accession/download/155488

7.3. Data access methods or services offered:

Contact the individual identified as the distributor for this dataset. Please include the title of the dataset and the name of the data steward when requesting a copy of this data.

7.4. Approximate delay between data collection and dissemination:

2 days

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended) NCEI_MS

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- **8.2. Data storage facility prior to being sent to an archive facility (if any):**National Centers for Environmental Information Silver Spring, Maryland Silver Spring, MD
- **8.3.** Approximate delay between data collection and submission to an archive facility: 365 days
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Data resides on Networked Attached Storage (NAS) environment. Security patches/updates are immediately applied to the host environment. Data is stripped/mirrored using RAID 50 technology. Nightly backups are preformed and files are written to magnetic tape and stored in an onsite / offsite location.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.